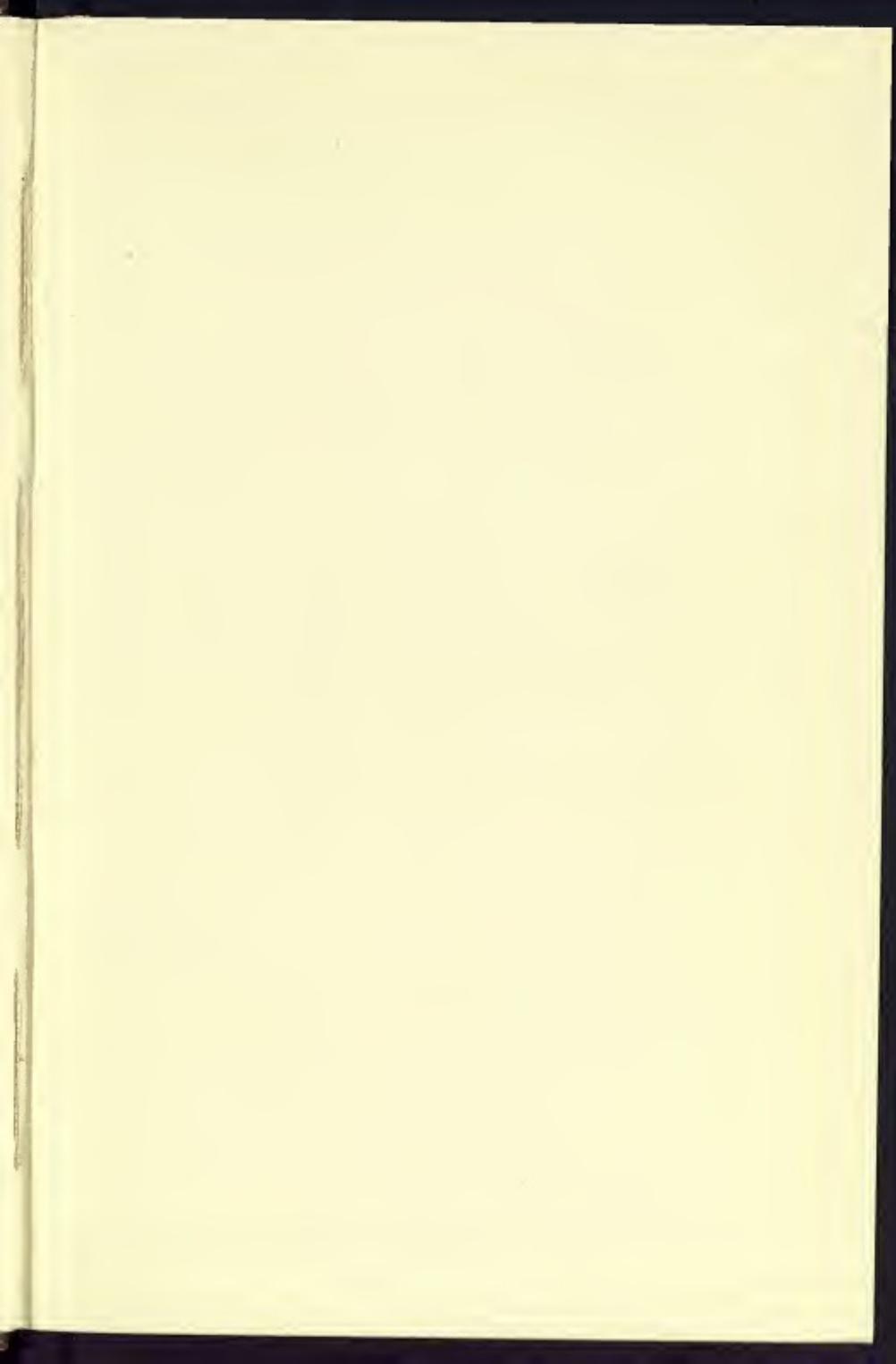
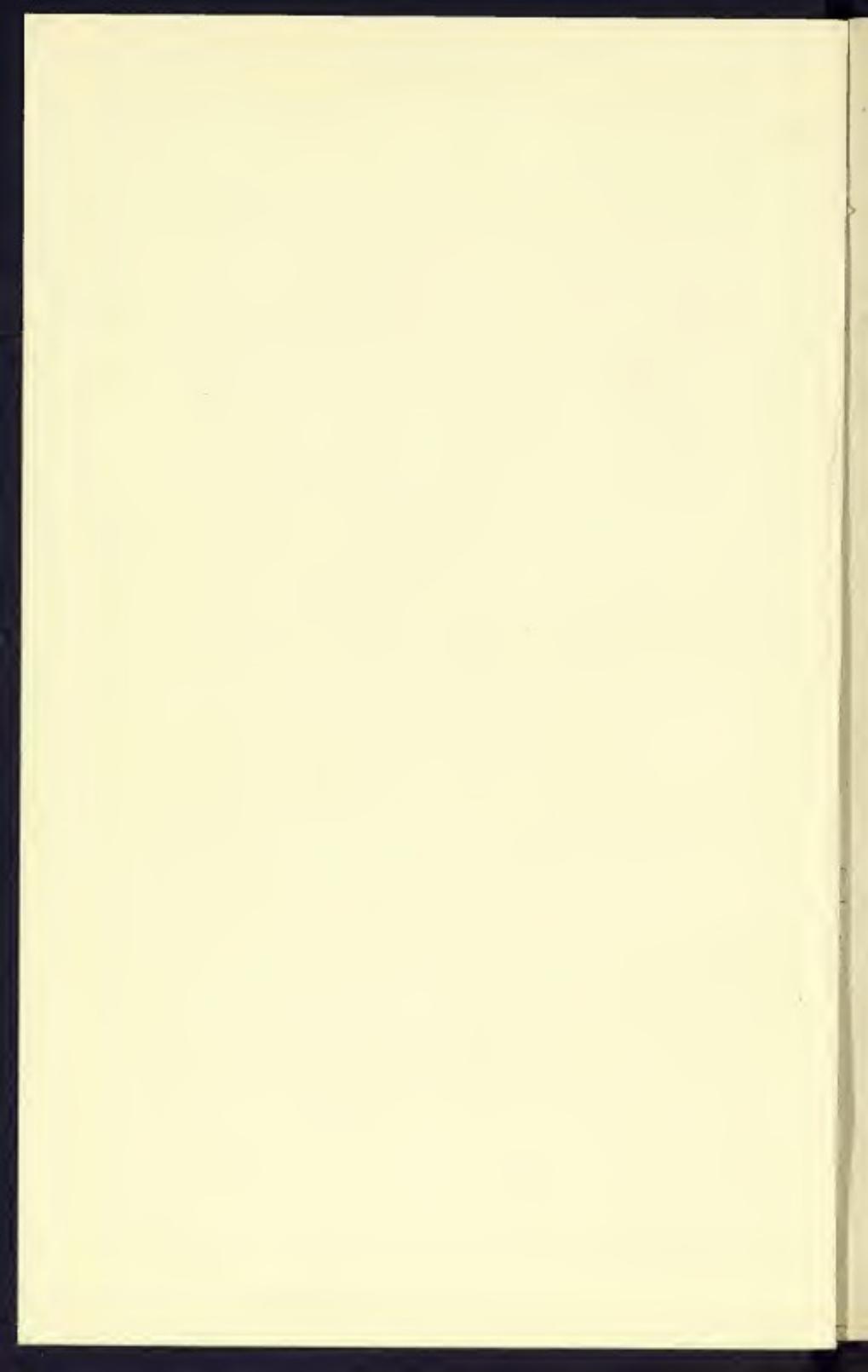


SOUTHAMPTON
UNIVERSITY LIBRARY

BOOK NUMBER	59-681760
CLASS MARK	SF 239
	Perkins





HINTS
TO
DAIRY FARMERS:

BRING
AN ACCOUNT OF THE FOOD,
AND
EXTRAORDINARY PRODUCE OF A COW.

TO WHICH ARE NOW ADDED,
ECONOMICAL AND EASY
RULES FOR REARING CALVES.

By WILLIAM CRAMP,
KEEPER OF THE HOUSE OF CORRECTION, LEWES, SUSSEX.

PUBLISHED BY ORDER OF THE BOARD OF AGRICULTURE.
A NEW EDITION.

LONDON:
HENRY WRIGHT, AGRICULTURAL AND SPORTING
LIBRARY, 51, HAYMARKET.
1839.

PIS

ADVERTISEMENT.

THE management of Cows, recommended and practised by Mr. Cramp, of Lewes, in Sussex, has been attended with such uncommon success, as to justify a more general attention than has hitherto been paid to it ; and for the purpose of spreading a knowledge of the practice, it was resolved to print the information transmitted by Mr. Cramp, in such a form as may reasonably be expected to be read by many persons unaccustomed to expensive works. The Communications to the Board of Agriculture, in which these Reports of Mr. Cramp have hitherto been printed, are intended as a repository for the preservation of important papers ; but they have become too expensive for the generality of farmers to purchase, however desirous they might be of consulting them ; the Board has therefore ordered these Papers to be collected in one cheap publication.

As the world is apt, when any thing extraordinary comes before it, to doubt the authenticity of facts, it is proper to state the steps that were taken in order to ascertain the accuracy of these Reports : this could be done only by application to such

persons as know Mr. Cramp, and have had sufficient opportunities, not only of becoming acquainted with his personal character, but also of observing the management of his Cow. With this intention, the Board applied to the Earl of Chichester, who acts as a Magistrate for Sussex, which has given him repeated opportunities of remarking Mr. Cramp's conduct as a Keeper of the House of Correction at Lewes. His Lordship considers him as one of the most careful and accurate of men, and who has performed the duties of that difficult office with singular reputation and applause;—and in regard to the Cow-Reports, his Lordship does not entertain the smallest doubt of their accuracy—an opinion which induced him originally to recommend Mr. Cramp to the attention of the Board. Mr. John Ellman, of Glynd, who resides within two miles of Lewes, has known Mr. Cramp for many years; has seen every particular of his management many times; speaks of him in terms of high approbation; and as one whose character stands much too fair, to permit the smallest suspicion of any deception, and too careful in every part of his conduct, to render any inaccuracy proba-

ble. Other persons, who have viewed the House of Correction and the Cow, have been equally disposed to credit these accounts.

The method of feeding described in these Papers, and the great attention paid to the act of milking, merit universal imitation; and notwithstanding the difficulty which may be found in many places, of procuring *grains*, yet it is to be remembered, that Mr. Cramp has pointed out substitutes for that species of food, which, in his opinion, would be equally productive of milk, though beyond his power of acquiring them in so peculiar a situation as his.

Without supposing that all the Cows in the kingdom could possibly be managed with the attention here described, yet it is fair to conceive, that on the principles herein laid down, a great improvement might every where take place; and as the system is founded upon a perpetual confinement of the Cows, and consequently a perpetual increase of dung, the extension of the practice would not only cause a vast augmentation of dairy produce, but be felt also, most essentially in that of arable land, by the great increase of manure. In a word,

the Board is extremely anxious that the practice here detailed should be generally known, and they cannot but recommend to their Members to take every means of extending it; and should any experiments be made, and carefully registered, on this interesting object, the communication to the Board will be thankfully received, and properly attended to.

London, 25th June, 1811.

The former Edition of these Hints being out of print, it is deemed necessary to bring them again before the Public. To the interesting Documents already given, *Two additional Years* are now added, containing a succession of the extraordinary produce of Mr. Cramp's Cow, and a valuable and important detail of the *economical system which he has adopted for rearing his Calves.*

These valuable communications are transmitted through the same highly respectable channel as the former; which puts any doubt as to their accuracy and authenticity entirely out of question.

London, July 1813.

PRODUCE OF A COW.

An Account of the Produce of Milk and Butter from a Cow, the property of William Cramp, of Lewes, in the County of Sussex, for one Season, commencing the 1st Day of May, 1805, (that being the Day she calved), to the 2nd Day of April, 1806, a space of Forty-eight Weeks and One Day.

BUTTER.

From the 1st of May to the 7th, kept no account; sold the calf for	1	—	—	£ 1 7 0
From 8th May to 25th June	7	15	105	1s. 6d.
From 26th June to 10th September	11	14	154	16
From 11th September to 29th October	7	12	84	16
From 30th Oct. to 3rd Feb. 1806	14	10	140	16
From 4th February to 10th March	5	8	40	16
From 11th March to 24th March	2	7	14	16
From 25th March to 2nd April, left off milking	1	3	1 6	0 4 6

Deduct for butter sold in the month of August for 1s. 4d. per lb. only, for three weeks	48	—	540	—	£ 41 14 0
Carry forward	0 7 0
					£ 41 7 0

Brought forward, . . . £41 7 0

MILK.

	Quarts per Day.	Quarts.
From 8th May to 25th June,	26	980
26th June to 10th Sept.	18½	1424
11th Sept. to 29th Oct.	16	785
30th Oct. to 3rd Fe- bruary, 1806	12	1176
4th Feb. to 10th March,	11	385
11th March to 24th March,	9	126
25th March to 2nd April,	5	45
		<hr/>
		4921
The milk being measured when milked from the cow, there must be deducted for cream	540	<hr/>
		4381
4381 quarts of skim-milk, at 1d. per quart		£ 18 5 1
Made in the course of the season, four large waggon-loads of dung, thoroughly rotten, worth 15s. per load		3 0 0
		<hr/>
Total expence, as below	£ 62 12 1	<hr/>
Profit	. 21 6 2	<hr/>
	£ 41 5 11	<hr/>

EXPENCE.

Grains consumed the summer, 26 weeks, 3½ bushels per week, at 4d. per bushel	£ 1 10 4
Bran, 1½ bushel per week, at 8d. per bushel	1 6 0
Winter 26 weeks, grains consumed, 8 bushels per week, at 6d. per bushel	5 4 0
Bran, 4 bushels per week, at 8d. per bushel	3 9 4
56lb. of hay per week, at 5s. 6d. per cwt.	3 11 6
Rent of the land whereon were raised the lu- cern, clover, carrots, &c.	0 15 0
To the wages of a man, at the rate of 52l. per ann. supposing him to attend ten cows; one-tenth is	5 4 0
Farrier, for three drinks at the time of calving	0 6 0
	<hr/>
	£ 21 6 2

The Cow was fed with artificial grasses, sown on the following plats of ground within the walls of the prison, containing by measurement as follows :

		Roods.	Perches.
No. 1. Sown with red clover and rye-grass		0	19
2. — with lucern		0	2
3. — with cow-grass and white		0	17
4. — with red and white clover		0	18
5. — with lucern		0	10 $\frac{1}{2}$
6. — with carrots		0	2 $\frac{1}{2}$
		1	29

The above crops of lucern were cut four times, and the clover three times, during the season, producing (each time) good crops. The Cow not allowed to feed on the grass ground, but cut and given her in a rack in a hovel, where she has a plat of about 18 square perches to range in. I keep but this Cow, nor have I had any other since I had her. She is seven years old, and has had five calves ; has been in my possession for two years.

Consumed much less food this year than the year before.

Food and Treatment.

Summer season, fed on clover, rye-grass, lucern, and carrots, three or four times a day ; and at noon-time about four gallons of

grains, and two of bran, mixed together ; always observing to give her no more food than she eats up clean. Winter season, fed with hay, bran, and grains, mixed as before stated, feeding her often, viz. five or six times a day, as I see proper, giving her food when milking ; keeping the manger clean when she is fed with grains ; not to let it get sour ; wash her udder at milking times with cold water, winter and summer. Never tie her up ; lays in or out as she likes ; particularly careful to milk her regularly and clean. Milch cows are often spoiled for want of patience at the latter end of milking them.

One man would attend ten cows through the year (with the exception of an assistant at milking times). Feeding milch cows as above stated, they will at all times be in good condition fit for the butcher, if an accident should happen. There will be no ground trampled and food spoiled, by cattle running over a vast tract of land. I think cattle may be fattened by the same mode of feeding, with much advantage ; one-fourth part of the land would feed them, a great quantity of manure made, and the

beast fatten much sooner. Cattle so fed, have nothing to do but fill themselves and lie down to rest. *No labouring for their food.* I fattened the two cows I had before this, and made them very good meat in about seven weeks, (I found it to answer, although I bought the food at a dear rate), giving them a little ground barley or oats mixed with the grains and bran. I think cows would nearly double (in the course of the season) their quantity of milk and butter, by following the above plan.

It is unnecessary for a cow to go dry long before she calves. The thing will tell for itself. When her milk changes brackish, she should then be dried off; that may be, in three, four, or five weeks before she calves. Milch cows seldom go dry before, unless it is from neglect, poverty, sickness, or bad milking. Let the milk stand two days in summer, and three days in winter, before it is skimmed.

I have stated no more than one penny per quart for skim-milk, but I am informed it sells in the town of Lewes for three half-pence, it being worth one penny to put in the hog-tub. I fattened two hogs in the

summer with no other food than skim-milk and grains, making them very good meat, weighing 16 or 18 stone each, at 8lb. per stone. Where cows are kept in this way, hogs should be kept, as the milk will be (in the summer time) thick and sour, and fit for nothing else but hogs ; the people of this country making no use of it as food.

The following is the Pedigree of the Cow in question, which I received from Mr. Holman, a respectable Farmer at Bentley, in the County of Sussex.

The Cow belonging to Mr. Cramp was bred by John Holman (my father), at Bentley, in Framfield, in the county of Sussex, from a Sussex-bred cow, also bred by John Holman, on the same farm ; she was got by a bull bred by Mr. Colgate, at Hampstead-farm, in Framfield aforesaid ; the father of which bull was also bred by Mr. Colgate, for which he obtained a prize-cup at Petworth, on the 20th day of November, 1796. She was calved in March, 1799.

(Witness)

THOMAS HOLMAN.

Lewes, March, 1806.

N. B. My Cow calved the 19th day of April ; the calf in very fair condition ; the cow having been dry for seventeen days only, was taken bad with the yellows at the very time of calving ; but is now recovered, and going on very well. The calf sold, at twelve days old, for 1*l.* 10*s.*

WILLIAM CRAMP,

Keeper of Lewes House of Correction.

Lewes, May 10, 1806.

The Second Year's Account, commencing the 19th Day of April, 1806, (that being the Day on which she calved), to the 27th Day of February, 1807, a space of time of Forty-five Weeks.

BUTTER.

	No. of Weeks.	Pounds per Week.	Quantity of Butter.	Sold at per Pound.	Total Value.
From the 19th of April to the 2nd of May, { gave no milk but what the calf sucked,	2	—	—	—	—
From the 3rd May to the 23rd May . . .	3	10	30	1s. 4d.	£ 2 0 0
From the 24th May to the 6th June . . .	2	10½	21	1 4	1 8 0
From the 7th June to the 3rd October . .	17	12	204	1 5	14 9 0
From the 4th October to the 12th December .	10	10½	105	1 6	7 17 6
From the 13th Dec. to the 6th Feb. 1807 .	8	9	72	1 6	5 8 0
From the 7th Feb. to the 27th Feb. left } off milking	3	6	18	1 6	1 7 0
	45	—	450	—	£ 32 9 6
Carry forward .					£ 32 9 6

Brought forward . . . £ 32 9 6

MILK.

	Quarts per Day.	Quarts.
From 3rd May to 23rd May	12	252
24th May to 6th June	14	196
7th June to 3rd Oct.	16	1904
4th Oct. to 12th Dec.	14	980
13th Dec. to 6th Feb.	11	616
7th Feb. to 27th Feb.	9	189
		<hr/>

4137

The milk being measured when milked from the cow, there must be deducted for cream . . .	450
	<hr/>

3687

3687 quarts of skim-milk, at 1d. per quart,	£ 15 7 3
come to	
Sold the calf for	1 10 0
Value of manure, four large waggon-loads	3 0 0
	<hr/>
Total expence	£ 52 6 9
	<hr/>
Profit	£ 30 16 1
	<hr/>

EXPENCE.

The same as in my last year's return	£ 21 6 2
An additional expence for farriering*	0 4 6
	<hr/>
	£ 21 10 8

* Having been taken ill with the yellows at the time of her calving, she required the assistance of a farrier for three weeks. The complaint fell into the udder, and was, no doubt, the cause of her not giving so great a quantity of milk as she did the season before. This complaint was very general amongst milch-cows that spring, in this neighbourhood; many cows totally lost their milk, and some died of the disease. I have stated this, because many persons have asserted I ruined my cow's constitution by milking her so long; and that she would never be the same again. The produce of milk was not so much as last season; but I have no doubt that it was in consequence of the complaint, and not from any other cause whatever. The produce of butter this season, proves her milk to have been equally as rich as it was the former season: the quantity of butter being in proportion to the quantity of milk. It will be observed, that the first fortnight she gave no more milk but what the calf sucked; and that she was not milked so long, by three weeks and one day, as she was the former season.

The Third Year's Account, commencing the 6th Day of April, 1807, (that being the Day she calved), to the 4th Day of April, 1808, a space of time of Fifty-one Weeks and Four Days.

BUTTER.

	No. of Weeks.	Pounds per Week.	Quantity of Butter.	Sold at per Pound.	Total Value.
From the 6th day of April to the 20th April,	2	6	12	1s. 6d.	£0 18 0
From the 21st April to the 1st June,	6	18	108	1 6	8 2 0
From the 2nd June to the 5th October,	18	16	288	1 6	21 12 0
From the 6th October to the 30th November,	8	13	104	1 6	7 16 0
From the 1st Dec. to the 8th Feb. 1808,	10	11	110	1 6	8 5 0
From the 9th February to the 14th March,	5	8	40	1 6	3 0 0
From the 15th March to 4th Feb. left off milking,	2½	5	13	1 6	0 19 6
Deduct for 280lb. butter, sold at 1s. 4d. } per pound only	51½	—	675	—	£50 12 6
Carry forward,	1 3 4	£49 9 2

Brought forward, . . . £49 9 2

MILK.

	Quarts per Day.	Quarts
From 6th April to 20th April, . . .	8	112
21st April to 1st June, . . .	22	924
2nd June to 5th Oct. . . .	20	2520
6th Oct. to 30th Nov. . . .	15	840
1st Dec. to 8th Feb. . . .	13	910
9th Feb. to 14th March, . . .	10	350
15th March to 4th April, . . .	7	126
		—

The milk being measured when milked from the cow, there must be deducted } for cream. 675

5107 quarts of skim-milk, at 1d. per quart,	£21	5	7
Value of dung made this season,	3	0	0
Sold my calf at 14 days old, for	2	12	6
	£76	7	3
Total expence,	24	14	2
	£51	13	1
Profit,			

EXPENCE.

Expence as in my last year's return,	£21	6	2
An additional expence in consequence of the } rise in price of grains and pollard, }	1	10	6
Ditto for 10 sacks of malt-dust, at 2s. 6d. per } sack	1	5	0
To the farrier, for five drinks at the time of } calving,	0	12	6
	£24	14	2

On trial, I found malt-dust to be serviceable to my Cow, giving her about a double handful at a time, mixed with the grains and pollard. I would not recommend a greater quantity.

It may be complained by some, that they cannot get grains to feed their milch cows with : that difficulty can be removed by potatoes as a substitute ; grinding them in a common apple-mill, or pounding them in a trough. Then mix the pollard with them, as recommended in my first report. Potatoes are a very fine food for milch cows.

My Cow calved the 23rd of April ; has a very fine calf, is in good condition, and going on as well as usual.

W. CRAMP.

Lewes, May 6, 1808.

The Fourth Year's Account, commencing the 23rd Day of April, 1808 (that being the Day on which she calved), to the 13th Day of February, 1809, a space of time of Forty-two Weeks and Three Days.

BUTTER.

	No. of Weeks.	Total Value.
	Pounds per Week.	
	Quantity of Butter.	
From the 23rd April to the 6th May	2½	£ 0 7 6
From the 10th May to the 6th June	4	1s. 6d.
From the 7th June to the 5th September	13	4 10 0
From the 6th Sept. to the 7th November	9	1 6
From the 8th Nov. to the 2nd Jan. 1809	8	13 13 0
From the 3rd January to the 16th January	2	1 6
From the 17th January to the 23rd January	1	0 9 0
From the 24th January to the 30th January	1	0 7 6
From the 31st January to the 6th February	1	0 6 0
From the 7th Feb. to the 13th Feb. left off milking	1	0 3 0
Deduct for 80lb. of butter, sold at 1s. 4d. per pound only	42½	—
Carry forward	466	—
		£ 34 19 0
		0 14 0
		£ 34 5 0

Brought forward, . . . £34 5 0

MILK.

	Quarts per Day.	Quarts,
From 23rd April to 9th May, . . .	3 . . .	51
10th May to 6th June, . . .	20 . . .	560
7th June to 5th Sept. . . .	18 . . .	1638
6th Sept. to 7th Nov. . . .	16 . . .	1008
8th Nov. to 2nd Jan. . . .	12 . . .	672
3rd Jan. to 16th Jan. . . .	9 . . .	126
17th Jan. to 23rd Jan. . . .	8 . . .	56
24th Jan. to 30th Jan. . . .	7 . . .	49
31st Jan. to 6th Feb. . . .	6 . . .	42
7th Feb. to 13th Feb. left, off milking,	2½ . . .	17

4219

The milk being measured when milked from the cow, there must be deducted	{	466
for cream		3753

3753 quarts of skim-milk, at 1d. per quart, . . . £15 12 9

Value of dung made this season, 3 0 0

Sold the calf at 17 days old, for 1 16 0

£54 13 9

Expence as in my last year's report, 24 14 2

Profit, £29 19 7

Note.—There has been a doubt in the minds of some people, that I have over-rated my skim-milk, at one penny per quart. According to the price of food in this part of the country where I reside, I am still in the

same opinion, that skim-milk, at one penny per quart, is cheaper than any other food I can buy to feed my pigs; ground corn not being sold for some years past at less than 4s. 6d. or 5s. per bushel, weighing about 36lbs. When I oppose 60 quarts of milk to a bushel of such food, I am fully convinced it would do more than the bushel of corn. I do not hesitate to say, I think 60 quarts of skim-milk equal to a bushel of such corn, if bought at 3s. 6d. per bushel.—No doubt, in that part of the country where corn can be bought for 2s. or 2s. 6d. per bushel, skim-milk would there be of less value; but I have stated my price suitable to that part of England where I am a resident. Gentlemen who live in Ireland, Scotland, Wales, and in the cheaper parts of England, will, no doubt, think skim-milk very dear at one penny per quart: I have seen it sold four quarts a penny in Ireland.

In managing milch cows after the manner I have described, difficulties may arise in the opinion of many people; but I think there are few difficulties but what might be remedied. If grains cannot be had, there is no land but will produce potatoes, and

they are an excellent substitute for grains, pounded in a trough, or ground in a common apple-mill, and then mixed with bran. Bran also would be a good substitute for grains, wetting it to the same state as grains, and then mix a little ground oats or malt-dust to separate it. Milch cows may be fed with turnips and cabbages, provided proper attention be paid in doing it. One meal a day of turnips or cabbages will not affect the milk, provided care be taken, not to give them any rotten or withered leaves. One rotten turnip or cabbage, would do more injury to milk and butter than a cart-load of sweet sound food. I have often given cabbage to my cow without any ill effects whatever. I have sown rye, and tares, which I find to answer; they will come rather sooner than lucern, if sown the first week in September. One gallon of rye is sufficient to mix with a bushel of tares. If the rye be sown too thick, it will overpower the tares, and injure them; but sown moderately thin, it will support the tares, and keep them from the ground. I have sown oats and red clover, and cut the oats before they come out in ear; the oats will shoot up again (if cut before they are in full ear), and the clo-

ver grow up with them, and produce a good second crop ; the clover will be in full perfection the spring following. After the crop of rye and tares come off, lucern may be sown, and it will be fit to cut once the same summer, but not later than the middle of October. The lucern will be in full cultivation the next summer, and will produce four cuttings the season. Lucern should be cut before it grows hard and sticky, or it admits waste, and loses much of its goodness.

Dairies of any size could be managed after the manner which I have laid down, in most of its rules ; a dairy of ten cows would require a plat of ground of about a quarter of an acre to range in ; twenty cows, half or three-quarters of an acre ; and so in proportion to the number.—No land but will grow artificial grasses and vegetables ; and, no doubt, it would answer even to cut the natural grass and feed them. The object is the great saving, for less than half the land would maintain them. The cattle produce (in general) nearly double the quantity of milk and butter, and a great quantity of manure made. Where cattle are kept in this manner, the dung should be gathered up every day, and thrown into a heap. The

land to be cut, should be that which lies nearest to the yard where the cattle are confined, in order to save carriage. Where milch cows are allowed to range abroad for their food, they will never produce that quantity of milk that they will when confined, let their food be ever so plenty; when they are not hungry, they will be searching after the sweetest spots of herbage, and thereby deprive themselves of rest. Cattle, when hand-fed, will seldom refuse any sort of food, if properly attended; and no part of this country need be at a loss for provisions to feed them. Where grains and pollard cannot be had, milch cows should have a little nice hay (not heated) once a day, to keep them in a proper state, otherwise all green food would make them too loose. Often changing food is good for milch cows. I seldom give my cow two sorts of food following. I cannot be at a loss where there is so great a variety to be had, viz. rye and tares, lucern, cinquefoil, trefoil, cow-grass, clovers, natural grass, green oats, carrots, cabbage, turnips, grains, bran, pollard, hay, &c. &c.

THE DAIRY.

Without proper attention to this part, much loss and damage would ensue. The vessels that keep the milk should be carefully attended to in cleaning ; if the acid of the milk is not scalded out clean, it will do much injury to the fresh milk, and make the butter hot and bitter. I have my milk-pans boiled two or three hours : merely putting a little scalding water into a pan to clean it, is not sufficient ; the acid of the milk will penetrate into the vessels, and cannot be got out by a little hot water.

It is the opinion of many people, that if the cream is not taken off whilst the milk is sweet, the butter cannot be good. But I am convinced that is a very wrong notion ; milk should stand as long as it is sound, before it is skimmed, to make the most for butter. When cheese is made, it must be skimmed whilst it is sweet ; but to say how long milk should stand before the cream be taken off, is not in my power ; it depends much on the weather, for that has the ruling of milk in a great measure. In cold weather, milk may stand three, four, five, or six days before it is skimmed ; but in hot, close, or thunder-

ing weather, perhaps not twenty-four hours. The cream will keep best on the milk, as long as the milk is sound, and will be adding in quantity by milk being sound ; I mean, the cream should not be left on till the milk gets putrid; the cream will show that by changing spotty. The sooner cream is churned into butter after it is taken off the milk, the better ; I churn twice a week with one cow. In summer the churn should be made as cold as possible when the cream is put in to be churned ; and in cold weather quite the contrary, by putting boiling water into the churn to make it warm. I believe most people wash their butter with plain water to get out the butter-milk, but that will not answer so well as salt and water. If the butter-milk is not got out clean, the butter will not keep many days good (as fresh butter); it will turn bitter and sour.

My cow calved the 3rd of April, has got two very fine calves ; is in good condition, and promising to do equal to any former season. She was ten years old last March (now past) and has been in my possession five years.

W. CRAMP.

Lewes, April 26, 1809.

The Fifth Year's Account, commencing the 3rd Day of April, 1809 (that being the Day she calved), to the 8th Day of May, 1810, a space of time of Fifty-seven Weeks.

BUTTER.

Twin calves, at nine weeks old, for six }
guineas each
From the 6th June to the 3rd July
From the 4th July to the 18th September
From the 19th Sept. to the 13th Nov.
From the 14th Nov. to the 25th Dec.
From the 26th Dec. to the 26th Feb. 1810
From the 27th Feb. to the 23rd April
From the 24th April to the 30th April
From the 1st May to the 7th May, left off } milking

No. of Weeks.	Pounds per Week.	Quantity of Butter.	Sold at per Pound.	Total Value.
9	—	—	£12 12 0	—
4	17	68	1s.6d.	5 2 0
11	16	176	1 6	13 4 0
8	14	112	1 6	8 8 0
6	12	72	1 6	5 8 0
9	10	90	1 6	6 15 0
8	8	64	1 6	4 16 0
1	7	7	1 6	0 10 6
5	5	1	6	0 7 6
57	—	594	—	£57 3 0
Carry forward	.	.	.	£57 3 0

Brought forward, . . . £ 57 3 0
MILK.

	Quarts per Day.	Quarts.
From 6th June to 3rd July,	24 . . .	672
To the 18th September, . . .	22 . . .	1694
13th November,	11 . . .	1008
25th December,	14 . . .	588
26th February, 1810, .	12 . . .	756
23rd April,	10 . . .	560
30th April,	8 . . .	56
7th May,	5 . . .	35
		<hr/>
		5369
The milk being measured when milked from the cow, there must be deducted for cream,	{	594
		<hr/>
Total,		4775
		<hr/>

4775 quarts of skim milk, at 1d. per quart, . . . £ 19 17 11

*Value of New Milk, exclusive of
what the Calves sucked.*

From 3rd April to 9th April,	£ 0 17 6
10 quarts per day—70 quarts, { at 3d. per quart, . . .	1 8 0
To 23rd April, 8 quarts per day { —112 quarts, at 3d. per quart. {	1 1 0
To 7th May, 6 quarts per day { 84 quarts at 3d. per quart . {	0 14 0
To 21st May, 4 quarts per day { 56 quarts, at 3d. per quart, {	0 10 6
To 4th June, 3 quarts per day { —42 quarts, at 3d. per quart, {	———
	£ 4 11 0
Value of dung made this season,	3 0 0
	<hr/>
Expence deducted, as in my last year's report, . . .	£ 84 11 11
	<hr/>
Profit,	£ 59 17 9
	<hr/>

The management of a large dairy (after the plan which I have laid down), may be attended to in most of its rules. Grains seem to be the greatest obstacle. I will suppose they are not to be had at all; seven months in the year they are not wanted, as every kind of artificial food can be had in great plenty, giving a little sweet hay once a day, to keep them in a regular state. In the winter time there may be provided turnips, cabbages, and potatoes; the two former will no ways affect the milk and butter, if given moderately twice a day, carefully avoiding giving them rotten and withered leaves; and giving them plenty of sweet (green saved) hay, they will, (no doubt), do much better than ranging abroad in the cold, hungry fields, labouring and fatiguing themselves for food, injuring the land, and thereby occasioning great loss of manure. Thirty acres of land* would be sufficient to produce food enough for forty dairy cows (if properly managed), including for hay; where, in the common mode of feeding, twice that number of acres would not do,

* Something more or less: much depends on the quality of the land, and management.

and they would not produce above half the quantity of milk and butter. I think salting hay, when made into a rick for milch cows, would answer a good purpose. If salt could be had reasonably, about 20lbs. to a ton of hay, shaken regularly over every layer by the makers of the rick, would cause thirst, and thereby increase milk. The quantity of food milch cows will consume, is not easy to ascertain ; they should have sufficient, but not to commit waste. Cattle should not be over fed, so as to be surfeited ; little at a time, and they will eat their food clean. I feed my Cow six or seven times a day.

In my statement this season, I have given no account of milk further than up to the 7th May, although she was milked up to the day before she calved (*she would not go dry*) ; but the milk being brackish, was fit for no use but the hogs. I do not perceive the least injury she had sustained by it; her milk came with the calves, and as soon, and as plentiful as if she had been dry for two months, and her calves in good and lusty condition. She is now in as great perfection for the dairy as in any former

season. It will be observed, my cow produced a greater quantity of milk this season than any former one, but not a greater quantity of butter: that I cannot account for: it may be, the having twins, Nature ordered it so, that they might be sufficiently supplied. It will be also observed, she produced a great quantity of milk, beside what the calves sucked; and why not make butter? The trial was made but in vain; the cream produced was small in quantity, and poor; and every trial made to make it into butter, for many hours, was to no purpose. This strange circumstance I am quite at a loss to account for, as I always milked her myself, sometimes before the calves sucked, and at other times after; but the milk I got, produced no cream sufficient in quality to make butter.

—*Query.* Could the cow have a power of withholding the creamy part of her milk from me; or could the calves have an art of sucking it?

The Sixth Year's Account, commencing the 30th Day of May, 1810 (that being the Day she calved), to the 20th Day of March, 1811, a space of time of Forty-two Weeks and One Day.

BUTTER.

From the 30th May to the 19th June
 From the 20th June to the 4th September
 From the 5th Sept. to the 14th Nov.
 From the 15th Nov. to the 12th Dec.
 From the 13th Dec. to the 9th Jan. 1811
 From the 10th Jan. to the 30th Jan.
 From the 31st Jan. to the 20th Feb.
 From the 21st Feb. to the 20th March

No. of Weeks.	Pounds per Week.	Quantity of Butter.	Sold at per Pound.	Total Value.
3	24	1s 6d.	£1 16 0	
8	176	1 6	13 4 0	
11	140	1 6	10 10 0	
10	12	1 6	3 12 0	
4	40	1 6	3 0 0	
4	27	1 6	2 0 6	
3	18	1 6	1 7 0	
3	12	1 6	0 18 0	
42	—	—	£36 7 6	
—	485	—		
Carry forward			£36 7 6	

Brought forward . . . £36 7 6

MILK.

	Quarts per Day.	Quarts.
From 30th May to 19th June .	10 ..	210
20th June to 4th Sept. .	20 ..	1540
5th Sept. to 14th Nov. .	18 ..	1260
15th Nov. to 12th Dec. .	14 ..	672
13th Dec. to 9th Jan. 1811, 12 .	..	480
10th Jan. to 30th Jan. .	10 ..	210
31st Jan. to 20th Feb. .	8 ..	168
21st Feb. to 20th March,	4 ..	80
		4620
The milk - being measured when milked from the cow, there must } .	485	
be deducted for cream . .		4135
4135 quarts of skim-milk, at 1d. per quart . . .	£17 4 7	
Value of dung made this season	3 0 0	
Sold the calf at 10 days old, for	2 2 0	
	£58 14 1	
Expence as in my last year's report	24 14 2	
Profit	£33 19 11	

My Cow calved the 30th of April ; had a very fine calf ; milked her till she calved ; her milk was brackish for a month, and fit for no use but the hogs ; she then sprunged very quick, and her milk became perfectly sweet and good for a week before she calved, and fit for any use whatever; a very clear proof of the high perfection she was in ;

and since I parted with the calf, I have made 16 lbs. of butter per week, and am now in the act of doing so. For my part, I require no other proof than what I have experienced, to convince me of the great advantage of feeding cattle after the plan I have laid down. Masters and mistresses who undertake to do their own work, will soon find the advantage arising from this mode of treatment; and if put into the hands of servants, there is no difficulty whatever, but which a simple person may overcome, with the directions of their master and mistress in the beginning. There is generally some trouble in forming any new mode that is a public benefit, and likewise in laying aside an old one, let it be ever so bad.

W. CRAMP,
Keeper of Lewes House of Correction.

Lewes, June 20, 1811.

The Seventh Year's Account, commencing the 30th Day of April, 1811, (that being the Day she calved), to the 3rd Day of March, 1812, a space of time of Forty-four Weeks.

BUTTER.

	No. of Weeks.	Pounds per Week.	Quantity of Butter.	Sold at per Pound.	Total Value.
From the 30th of April to the 13th of May	2	8	16	1s. 6d.	£1 4 0
To the 2nd of September	16	16	256	1 6	19 4 0
21st of October	8	14	112	1 6	8 8 0
25th of November	4	12	48	1 6	3 12 0
30th of December	5	10	50	1 6	3 15 0
20th of January, 1812	3	8	24	1 6	1 16 0
3rd of February	2	7	14	1 6	1 1 0
17th of February	2	5	10	1 6	0 15 0
3rd of March	3	6	1	6	0 9 0
	44	—	536	—	£40 4 0
Carry forward	.	£40	4 0		

Brought forward, . . . £40 4 0

MILK.

	Quarts per Day.	Quarts.
From 30th April to 13th May, . . .	10	140
To the 2nd September,	20	2240
21st October,	18	1008
25th November,	16	448
30th December,	12	420
20th January, 1812,	10	210
3rd February,	8	112
17th February,	7	98
3rd March,	5	70
		<hr/>
		4746
The milk being measured when milked from the cow, there must be deducted } for cream, } Total, } <td style="text-align: right; vertical-align: bottom;">536</td> <td style="text-align: right; vertical-align: bottom;"><hr/><hr/><hr/></td>	536	<hr/> <hr/> <hr/>

4210 quarts of skim-milk, at 1d. per quart, . . .	£17 10 10
Value of dung made this season,	3 0 0
Sold my calf at 10 days old, for	2 2 0
	<hr/>
	£62 16 10
Expenses, as in my last year's report,	<hr/> 24 14 2
Profit,	<hr/> £38 2 8

Note.—I made no butter after the 3rd of March, as her milk got brackish; but I continued milking till she calved, making no other use of her milk but for the hogs. She calved the 4th of April, and is now in as fair condition as in any former season.

The Eighth Year's Account, commencing the 4th Day of April, 1812, (that being the Day she calved), to the 13th Day of March, 1813, a space of time of Forty-nine Weeks.

BUTTER.

	No. of Weeks.	Total Value.		
		Pounds per Week.	Quantity of Butter.	
			Sold at per Pound.	
From the 4th of April to the 11th of April,	1	—	—	—
To the 9th of May,	4	10	40	£3 0 0
8th of August,	13	16	208	1s.6d. 15 12 0
19th of September,	6	14	84	1 6 6 6 0
7th of November,	7	12	84	1 6 6 6 0
26th of December,	7	10	70	1 6 5 5 0
30th of January, 1813,	5	8	40	1 6 3 0 0
20th of February,	3	5	15	1 6 1 2 6
13th of March,	4	12	1	6 0 18 0
	49	—	553	—
				£41 9 6
Carry forward,				£41 9 6

Brought forward, . . . £ 41 9 6
MILK.

From the 4th of April to the 11th of April,
the calf sucked all her milk.

	Quarts per Day.	Quarts.
From 12th April to 9th May,	12 . . .	336
To the 8th of August,	22 . . .	2002
19th of September,	18 . . .	756
7th of November,	14 . . .	786
26th of December,	12 . . .	588
30th of Jan., 1813,	10 . . .	350
20th of February,	7 . . .	147
13th of March,	6 . . .	126
		5091
The milk being measured when milked from the cow, there must be deducted for cream.		553
		4538
4538 quarts of skim-milk, at 1d. per quart,	. . .	£ 18 18 2
Value of dung made this season	3 0 0
My calf was judged to weigh about 33 stone at 18 weeks old, the value of which would amount to 9l. 18s. at 6s. per stone (at 8 lb. per stone), the com- mon price of veal at that time in this town.		9 18 0
Expenses,	. . .	£ 73 5 8 27 14 8
Profit	45 11 0

EXPENCE.

Expence, as in last year's report, £ 24 14 2
Reared the calf for my own use; expenses
of which (as near as I can ascertain),
are as follows:

Brought forward £ 24 14

New milk, about 56 quarts,	} at 3d. per quart.	£ 0 14 0
Skim-milk, about 300 quarts,		1 5 0
Oatmeal,	at 1d. per quart,	0 14 0
Hay, bran, grains, grass, &c. .		0 7 6
		<u>3 0 6</u>
		<u>£ 27 14 8</u>

REARING CALVES.

As the above statement of the expense of weaning my calf may seem strange to many people, I think it may be proper to explain my mode of feeding, which was as follows :

I allowed the calf to suck the cow the first two days only, and afterwards milked the cow and gave it to the calf. There was some little trouble in getting it to drink the milk for a day or two, but it soon became quite natural. At the end of three weeks I left off giving new milk, and fed it with skim-milk, adding about three pints of oatmeal gruel to the milk at each time of feeding (twice a day), putting the gruel hot into the milk, which made it sufficiently warm, for great care should be taken not to give it too warm ; for no harm can arise by its being cold, but much damage in being hot : not more than

milk-warm in the beginning, and decreasing gradually in giving it warm, till you give it quite cold. I so continued feeding till it was about ten weeks old, and then gradually left off the oatmeal gruel, by lessening the quantity every time; I also weaned her of milk in like manner, by adding water to milk, till I reduced it to mere water, and as the gruel and milk were taken off, it took to eat hay, bran, grains, &c. At fourteen weeks old I had my calf completely weaned, and kept her four weeks afterwards on hay, bran, grass, &c. During the whole of the time she was in high condition and not an instance of being in an ailing state during the eighteen weeks; at the end of which time I sent her to a friend's in the country, where she now is.

By this mode of feeding, it will be seen I trained up a fine calf, without any reduction of butter, except a trifle in the beginning. I am certain this mode of bringing up calves must be a very advantageous one, not only the saving in butter, &c. but I think the cow is saved; for by allowing the calf to run with the cow till it is weaned, the cow is totally spoiled (for milk) that season; for she cannot be regularly milked, and what the calf does not suck, must dry

away, and cause a contraction in the udder, which may ever after be an injury, especially if it be the first calf : in that case, every care ought to be taken to draw the milk, in order to expand the udder ; for want of which many a valuable cow is spoiled for the dairy, and can never after be made what she would have been, if proper attention had been given at first.

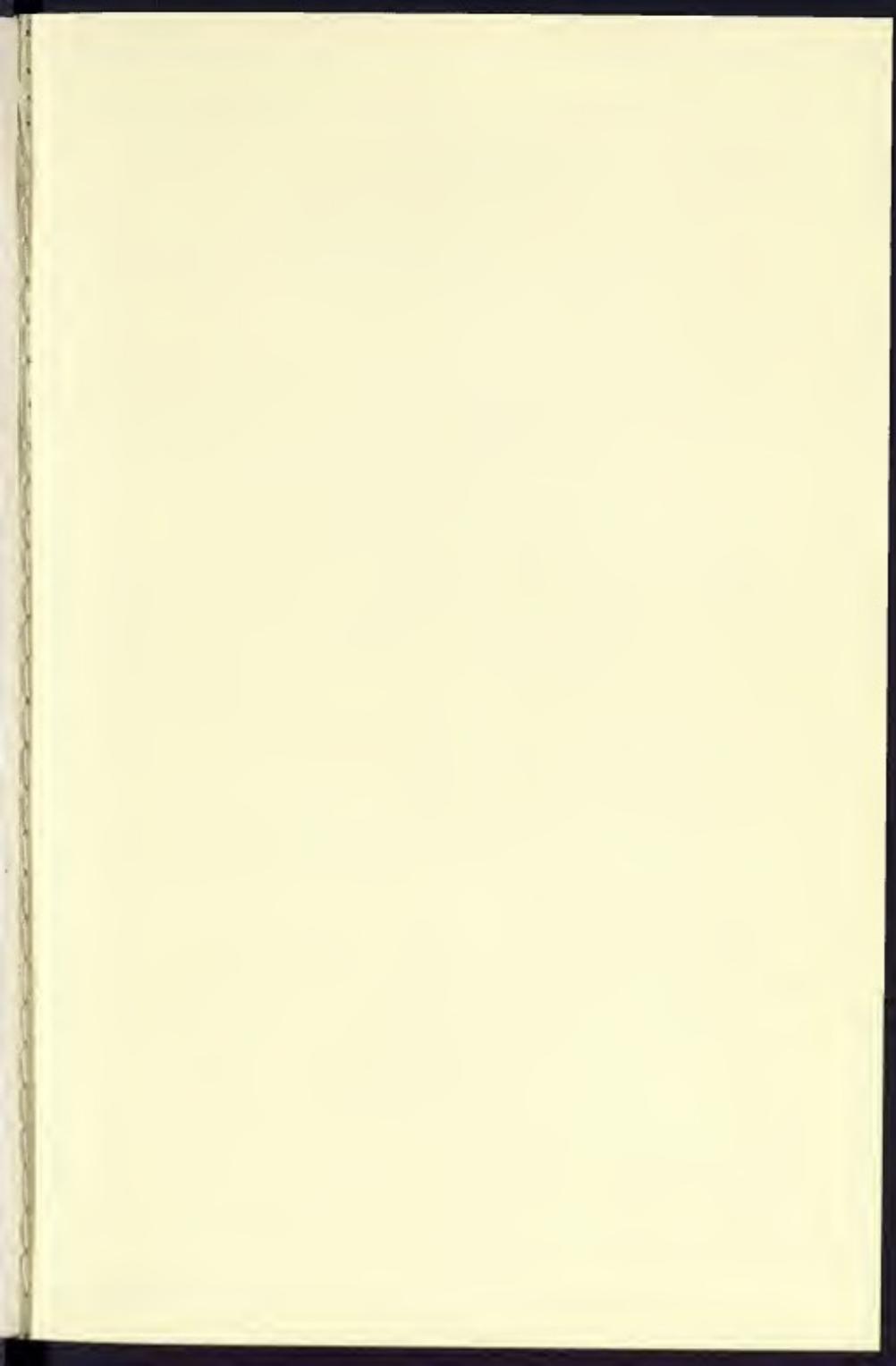
I am sure our Sussex cows are naturally good for milk ; they have every symptom of it; they want nothing but good management ; the farmers of Sussex pay every attention to rearing their calves; but they spoil their cows (for the dairy) in doing it, which certainly is quite unnecessary, for the calf may be reared as well, and the cow saved for the dairy.

My Cow calved the 2nd of April, has a very fine calf, and is in as profitable state as at any former time. I am bringing up the calf on the same principle as I did the one last year, and find no difficulty in it whatever.

W. CRAMP.

Lewes, April 10, 1813.

For these Accounts, the Board of Agriculture voted Mr. Cramp their *Honorary Silver Medal.*



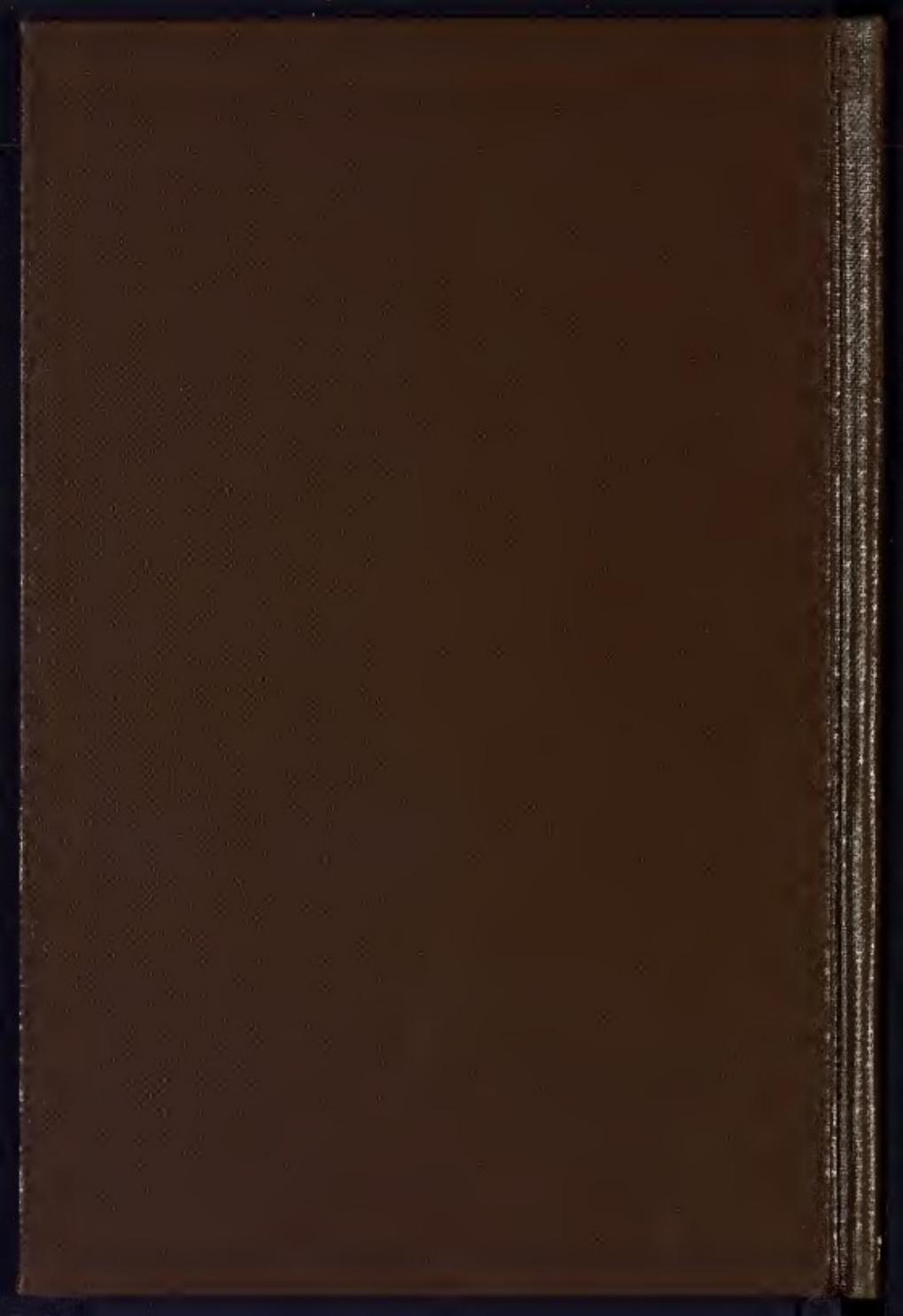
SOUTHAMPTON UNIVERSITY LIBRARY

Date of Issue

--	--	--	--

176





THE
LITERARY
MAGAZINE
OF
THE
UNITED
STATES
AND
CANADA
FOR
1838.
VOLUME
III.

DELMONTE